

We Claim:

1. A femoral component for a total knee joint replacement comprising,

5 a plurality of segments, each of said segments having a femoral fixation surface adapted to be positioned on a distal end of a femur and at least one assembly surface adapted to be joined to an assembly surface of an adjacent one of said segments said assembly surface being generally planar and arranged to be oriented
10 generally in a plane extending in a proximal-distal direction and in an anterior-posterior direction when said femoral fixation surface is positioned on said distal end of said femur.

15 2. The femoral component for a total knee joint replacement of Claim 2, wherein said segment additionally comprises a bearing surface

20 3. The femoral component for a total knee joint replacement of Claim 2, wherein at least two adjacent segments each comprise a bearing surface, said assembly surfaces of said segments being in mutual contact and said

bearing surfaces of said adjacent segments being positioned to form a generally continuous bearing surface of said prosthesis.

5 4. The femoral component for a total knee joint replacement of Claim 3, wherein,

edges of said mutually contacting assembly surfaces are recessed below said generally continuous bearing surface of said prosthesis.

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5. The femoral component for a total knee joint replacement of Claim 1, additionally comprising:

at least one fastener holding said assembly surfaces
15 in mutual contact.

6. The femoral component of a total knee joint replacement of Claim 1 wherein said assembly surfaces are
20 provided with self-alignment structures.

7. The femoral component of a total knee joint replacement of Claim 6 wherein said self-alignment

structures are at least one projection on a first one of
said assembly surfaces and at least one complementary
depression on a second one of said assembly surfaces
adapted to mate with said first one of said assembly

5 surfaces.